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NOTICE OF ALLOWANCE AND FEE(S) DUE

44989 7590 09/23/2009

HARRITY & HARRITY, LLP
11350 Random Hills Road
SUITE 600
FAIRFAX, VA 22030

EXAMINER

SPOONER, LAMONT M

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 09/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,333

10/31/2003

Georges R. Harik

0026-0056

8524

TITLE OF INVENTION: AUTOMATIC COMPLETION OF FRAGMENTS OF TEXT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	12/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

44989 7590 09/23/2009

HARRITY & HARRITY, LLP
11350 Random Hills Road
SUITE 600
FAIRFAX, VA 22030

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,333 10/31/2003 Georges R. Harik 0026-0056 8524

TITLE OF INVENTION: AUTOMATIC COMPLETION OF FRAGMENTS OF TEXT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$0 \$0 \$1510 12/23/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
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SPOONER, LAMONT M 2626 704-009000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,333	10/31/2003	Georges R. Harik	0026-0056	8524
44989	7590	09/23/2009	EXAMINER	
HARRITY & HARRITY, LLP 11350 Random Hills Road SUITE 600 FAIRFAX, VA 22030			SPOONER, LAMONT M	
			ART UNIT	PAPER NUMBER
			2626	
DATE MAILED: 09/23/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1179 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1179 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	10/697,333	HARIK ET AL.	
	Examiner	Art Unit	
	LAMONT M. SPOONER	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment filed 6/3/09.
2. ☒ The allowed claim(s) is/are 1-7,9-19,21,22,24-32 and 41.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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DETAILED ACTION

Introduction

1. This office action is in response to applicant's claims filed 6/3/09. Claims 1-7, 9-19, 21, 22, 24-32 and 41 are currently pending and have been examined.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul A. Harrity on 9/10/09.

In claim 30, line 5, delete "at least some of".

In claim 30, line 7, replace "endings associated" with - -endings, associated- -.

In claim 30 line 8, replace "where the sentence endings include" with - -as- -.

In claim 30, line 9, delete "the at least some of".

In claim 30, line 11, replace “endings, where” with - -endings and a location at which the text fragment occurs within the located sentences, where- -.

In claim 31, line 4, delete “at least a portion of”.

In claim 31, lines 5 and 6, delete “the at least a portion of”.

In claim 31, line 7, replace “completions associated” with - - completions, associated- -

In claim 31, lines 7 and 8, replace “where the sentence completions include” with - -as- -.

In claim 31, line 8 and 9, delete “the at least a portion of”.

In claim 31, line 11, replace “completions, and” with - - completions, assign scores to the sentence completions based, at least in part, on a measure of popularity associated with the sentence completions and a location within the located sentences at which the text fragment occurs, and- -.

In claim 31, line 13, replace “fragment.” with - -fragment based, at least in part, on the scores.- - .

In claim 41, line 5, delete “at least a portion of”.

In claim 41, line 6, delete “the at least the portion of”.

In claim 41, line 9, delete “the at least the portion of”.

In claim 41, line 12, replace “completion, and” with - - completion, assign scores to the sentence completions based, at least in part, on a measure of popularity associated with the sentence completions and a location within the identified sentences at which the fragment of text occurs, and- -.

In claim 41, line 14, replace “fragment of text.” with - -fragment of text based, at least in part, on the scores.- -.

Cancel claims 43, 44 and 45.

Allowable Subject Matter

3. Claims 1-7, 9-19, 20, 21, 24-32 and 41 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The instant application is deemed to be directed to a non-obvious improvement over the invention patented in Shanahan et al. (Shanahan, US 6,820,075) in view of Goodwin et al. (Goodwin, US 7,200,592).

Shanahan teaches automatic sentence completion of text fragments and Goodwin teaches scoring a document, including sentences, based on the location of matches, his beginning and end of the document).

However, neither Shanahan or Goodwin, alone or in combination teaches:

Regarding claim 1, **determining**, using a processor associated with the one or more server or client devices, **sentence endings** as **text** that is **located within the identified sentences between the text fragment and an end of the identified sentences**, assigning, using a processor associated with the one or more server or client devices, **scores to the sentence endings** based, at least in part, **on a location within the identified sentences at which the text fragment occurs**, outputting using a processor associated with the one or more server or client devices, the sentence endings as potential completions for the text fragment **based**, at least in part, **on the scores**.

Regarding claim 30, means for identifying sentence endings, associated with the located sentences, as **text** that is located within the located sentences **between** the **text fragment and an end of the located sentences**,

means for **assigning scores to the sentence endings** based, at least in part, on a measure **of popularity associated with the sentence endings and a location at which the text fragment**

occurs within the located sentences, where the measure of popularity associated with one of the sentence endings is based, at least in part, on a number of times that the one of the sentence endings occurs within the documents; and means for presenting the sentence endings as potential completions for the text fragment **based**, at least in part, **on the scores**.

Regarding claim 31, determine sentence completions, associated with the located sentences, as **text** that is **located within the located sentences between the text fragment and an end of the located sentences**, trim one of the sentence completions by dropping one or more words from the one of the sentence completions, **assign scores to the sentence completions** based, at least in part, on a measure of popularity associated with the sentence completions **and a location within the located sentences at which the text fragment occurs**, and provide a plurality of the sentence completions including the trimmed sentence completion as potential completions for the text fragment **based, at least in part, on the scores**.

Regarding claim 41, identify sentences within the documents that include the fragment of text, **determine sentence completions**

as text located within the identified sentences between the fragment of text and an end of the identified sentences, merge at least two of the sentence completions to form a single merged sentence completion, assign scores to the sentence completions based, at least in part, on a measure of popularity associated with the sentence completions and a location within the identified sentences at which the fragment of text occurs, and provide a plurality of the sentence completions, including the merged sentence completion, as potential completions for the fragment of text **based, at least in part, on the scores**.

4. Claims 2-7, 9-19, 20, 21, 24-29, and 32 depend from their respective allowed independent claims and thus are also deemed allowable.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hutchings (US 4,994,966) teaches determining the proper ending of a sentence.
- Abe et al. (US 6,173,253) teaches automatic sentence correction including corpus word count.
- Anderson (5,678,053) teaches automatic corrections thus word prediction in a sentence.
- Golding et al. (US 5,956,739) teaches automatic text correction and word completion.
- Burrows (US 6,963,869) teaches nesting and merging fields including paragraphs with respect to co-occurring matching word found in documents.
- Simonyi (US 2007/0150469) teaches a score of a matching segment found in a particular location of a string.
- King et al. (US 5,953,541) teaches predictive text entry based on disambiguation a key sequence.

- Balakrishnan et al. (US 5,952,942) teaches word prediction based on reduced keypad text entry.
- Kantrowitz et al. (US 6,618,697) teaches phrase completion.
- Kawaguchi et al. (US 5,757,983) teaches sorting and merging information.
- Laux (US 2001/0004737) teaches a merging driver for information and autocompletion of a query.
- Pazandak et al. (US 7,027,975) teaches a language interface with sentence completion list.
- Ferrell (US 5,885,083) teaches automatic sentence completion determination.
- Newsom et al. (US 2003/0232312) teaches presenting sentence completions to users.
- Williams et al. (US 2004/0153975) teaches text entry prediction and scoring.
- Miller et al. (US 5,896,321) teaches word prediction, and word count/popularity based prediction.
- Chua (US 2004/0183833) teaches a word score and predictive word input technology.

- Pun et al. (US 2003/0023426) teaches a predictive text system including ranking/scoring the predictive text.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAMONT M. SPOONER whose telephone number is (571)272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571/272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626

lms
9/10/09